REMARKS

The amendment filed on April 30, 2007 is considered non-compliant because it has failed to meet the requirements of 37 C.F.R. §1.121 due to each claim not having a proper status identifier. Applicant submits herewith the claims now have a proper status identifier. Applicant respectfully believes the amendment and response is now compliant.

Applicant respectfully traverses and requests reconsideration.

Claims 1-3, 6-23 stand rejected under 35 U.S.C. Section 102(e) as being anticipated by US Patent No. 5,872,942 (Swanstrom, et al.). This is a new ground of rejection. Swanstrom is directed to a computer system that includes a standard local system bus or expansion bus and also includes a dedicated real time bus or multimedia bus 130. A plurality of separate multi-media devices 142A-146A are connected to the dedicated real time multi-media bus 130. The cited portions of Swanstrom describes a different circuit and operation from that claimed.

For example, Claim 1 requires a video graphics and audio processing circuit that includes a video graphics processing circuit, an audio processing circuit, and a local bus that is operative to receive incoming data from a system bus and operatively coupled to receive data to and from the graphics processing circuit and the audio processing circuit. The office action alleges that the real time multi-media bus 130 of Swanstrom corresponds to the claimed local bus but does not indicate which bus in Swanstrom corresponds to the claimed system bus. Applicants note that Swanstrom uses the term "local system bus" to refer to bus 120 and that the office action sites to figures 7 & 10 allegedly teaching the claimed local bus operative to receive incoming data from the system bus and operatively coupled to transceive data to and from graphics processing circuit and audio processing circuit as claimed. However, figures 7 & 10 are described as having bus 130 <u>not</u> in communication with bus 120 and as such the recited portions do not teach what is

alleged (see e.g. Col 14, paragraphs 6-20 and 61-67). Accordingly, the claim is in condition for allowance.

Moreover, the claim requires that the local bus be coupled to both the graphics processing circuit and an audio processing circuit and the office action states that both of these circuits are taught by "one of the multi-media devices (142A-146A, Fig. 7)". As such, the office action alleges that a single device 142A corresponds to the applicants claim graphics processing circuit and audio processing circuit. However, the claim requires also <u>a bus arbitrator that is coupled to the local bus and the graphics processing circuit and the audio processing circuit wherein the bus arbitrator interprets the incoming data from the system bus</u> and provides the incoming data to the audio processing circuit or the graphics processing circuit and arbitrates outputting data on a local bus from these two circuits. The office action alleges that arbiter 504 of Fig. 7 or 614 of Fig. 10 corresponds to the claimed bus arbitrator. However, these arbiters "do not arbitrate between graphics processing circuits and audio processing circuits that are within a video graphics processing circuit has claimed, but to the contrary, arbitrate among different multi-media devices 142A, 144A, on a dedicated real time bus." As such, the cited portions of Swanstrom teaches arbitrating using a dedicated multi-media bus among a plurality of multi-media devices, and do not teach a circuit that receives incoming data from a system bus and also arbitrating between a graphics processing circuit and an audio processing circuit as part of a video graphics and audio processing circuit as required by the claims. For one or more of these reasons, this claim is in condition for allowance.

Applicants respectfully reassert to the relevant remarks made above with respect to the dependent claims and also respectfully submits that the dependent claims add additional novel and non-obvious subject matter. For example, claim 2 requires that the bus arbiter receives an

address via the local bus wherein the address comes from incoming data from the system bus. As noted above, the bus 130 in Fig. 7 & 10 as alleged does not communicate with the bus 120 in Swanstrom, and as such, the rejection should be withdrawn. In addition, this claim requires that the routing is done based on whether an address "identifies the audio processing circuit" or "graphics processing circuit". As such, the addressing scheme is on a per circuit basis. The sited portion mainly column 15 lines 54-67 determines which of the multi-media devices "should receive control of the multi-media bus 130". Again, there is no audio processing circuit based or graphics processing circuit based address arbitration described in the sited portion as such the claim is also in condition for allowance.

As to claim 6, the claim requires among other things, a method for bus arbitration among an audio processing circuit and a graphics processing circuit which includes determining whether at least one address identifies at least one of the audio processing circuit or the graphics processing circuit and when the address identifies both, arbitrating access to a local but between the two circuits. There is no portion in the sited reference set forth in the office action that addresses this claim language. In addition, since the address as claimed identifies both processing circuits, Applicant respectfully requests a showing as to which cited portion of the reference anticipates the subject matter in addition to the arbitration operations has if the rejection is unauthorized, claimed as applicant is unable to find such a teaching.

If the rejections are maintained, Applicant also respectfully requests a detailed rejection of each of the pending claims in a non-final action for claims 8 through 11, and others that have not been addressed. These claims include subject matter not addressed the office action and not taught in the sited reference. For example, claims 8 and 9 refer to enabling audio processing circuit to receive incoming data when an address identifies the audio processing circuit and when

the associated commands for inputting data. There is no enabling of graphics and audio processing circuits as claimed. Applicant also respectfully submits that the other dependant claims add additional novel and non-obvious subject matter.

Claims 4 and 5 stand rejected under 35 U.S.C. §103(a) as being un-patentable over Swanstrom et al. in view of U.S. Patient No. 6,546,426 (Post). Applicant respectfully reasserts the relevant remarks made above with respect to Swanstrom and as such these claims are also in condition for allowance.
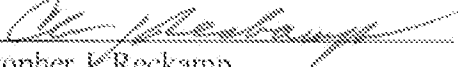
In addition, the Post reference also fails to teach the claimed subject matter. It is admitted that Swanstrom does not teach, among other things, an output data switch that includes an audio buffer that stores audio output generated by the audio processing circuit, a graphics buffer that stores graphics output data generated by the graphics processing circuit and a multiplexor operatively coupled to the audio buffer and the graphics buffer (the multiplexor outputs the audio output data or the graphics output data based on the output data control signal). Post has allegedly been cited as teaching the subject matter missing from Swanstrom and cites to Col. 3 lines 40-53 and refers to Fig. 1C as well as Fig. 1 and 2. However, the cited portions instead refer to a parser that merely passes video data into a video buffer and audio data into an audio buffer. There is no multiplexing of the information from these buffers based on control information as claimed. Accordingly, applicants respectfully submit that since the references do not teach the claimed subject matter the claims are in condition for allowance.

As to claim 24, the claim is also believed to be in condition for allowance since the video graphics processing circuitry, the audio processing circuitry and arbitrator are all on a single chip as disclosed in the specification. The Swanstrom reference actually teaches separate devices and separate arbiter 504 that arbitrates among separate devices.

Applicant respectfully submits that the claims are in condition for allowance and respectfully requests that a timely Notice of Allowance be issued in this case. The Examiner is invited to contact the below-listed attorney if the Examiner believes that a telephone conference will advance the prosecution of this application.

Respectfully submitted,

Date: _____5-23-07_____

By: _____
Christopher J. Reckamp
Registration No. 34,414

Vedder, Price, Kaufman & Kammholz, P.C.
222 N. LaSalle Street
Chicago, IL 60601
(312) 609-7599
FAX: (312) 609-5005